

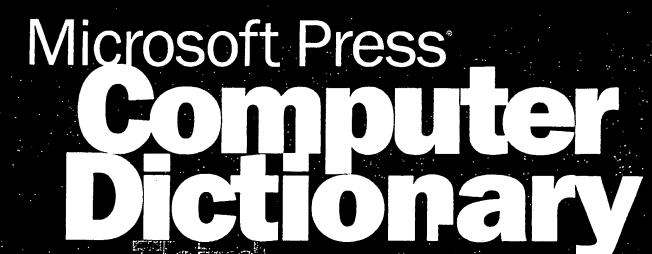


mputer Reference



The Comprehensive Standard for Business, School, Library, and Home





- Over 300 illustrations and diagrams
- Extensive Internet coverage
- Featured in Microsoft* Bookshelf*
- Covers software, hardware, concepts, and more!

Microsoft Press

PUBLISHED BY Microsoft Press A Division of Microsoft Corporation One Microsoft Way Redmond, Washington 98052-6399

Copyright © 1997 by Microsoft Corporation

All rights reserved. No part of the contents of this book may be reproduced or transmitted in any form or by any means without the written permission of the publisher.

. . 4 5

Library of Congress Cataloging-in-Publication Data Microsoft Press Computer Dictionary. -- 3rd ed.

p. cm.

ISBN 1-57231-446-X

1. Computers--Dictionaries. 2. Microcomputers--Dictionaries.

1. Microsoft Press.

QA76.15.M54 1997 004'.03--dc21

97-15489

CIP

Printed and bound in the United States of America.

5 6 7 8 9 QMQM 2 I 0 9 8

Distributed to the book trade in Canada by Macmillan of Canada, a division of Canada Publishing Corporation.

A CIP catalogue record for this book is available from the British Library.

Microsoft Press books are available through booksellers and distributors worldwide. For further information about international editions, contact your local Microsoft Corporation office. Or contact Microsoft Press International directly at fax (425) 936-7329.

Macintosh, Power Macintosh, QuickTime, and TrueType are registered trademarks of Apple Computer, Inc. Intel is a registered trademark of Intel Corporation. DirectInput, DirectX, Microsoft, Microsoft Press, MS-DOS, Visual Basic, Visual C++, Win32, Win32s, Windows, Windows NT, and XENIX are registered trademarks and ActiveMovie, ActiveX, and Visual J++ are trademarks of Microsoft Corporation, Java is a trademark of Sun Microsystems, Inc. Other product and company names mentioned herein may be the trademarks of their respective owners.

Acquisitions Editor: Kim Fryer

Project Editor: Maureen Williams Zimmerman, Anne Taussig

Technical Editors: Dail Magee Jr., Gary Nelson, Jean Ross, Jim Fuchs, John Conrow, Kurt Meyer,

Robert Lyon, Roslyn Lutsch

BEST AVAILABLE COPY

BEST AVAILABLE COPY

425

id international pitrate convendata structures, rice characteristandard (defini-

'shən-əl mem'lressable by an perating in real res (KB). Withs, conventional M accessible to cted mode, real nory, extended

A coming toetween different when telephone converge in the can also occur adsheet, when a edly recalculated iteration coming

nal\ adj. Of, per-: mode of operas, in which the engage in a dian responses. See

on-vər-sā'shə-nəl n which two or mit and receive also interactive

con-ver-sā'she-nəl ig language that it the computer in ised to more forr example, in a ecute a procedure im would use the in CHECK 10

sā'shə-nəl möd`\

The process of prmat to another;

where information is concerned, a changeover that affects form but not substance. Types of conversion include:

. A.

- Data conversion: Changing the way information is represented—for example, changing binary representation to decimal or hexadecimal.
- File conversion: Changing a file from one format to another. Another, more detailed, type of file conversion involves changing character coding from one standard to another, as in converting EBCDIC characters (which are used primarily with mainframe computers) to ASCII characters. See also ASCII, EBCDIC.
- Hardware conversion: Changing all or part of a computer system to work with new or different devices.
- Media conversion: Transferring data from one storage medium to another—for example, from disk to tape or from 3.5-inch Apple Macintosh disk to 5.25-inch MS-DOS disk.
- Software conversion. Changing or moving a program designed to run on one computer to run on another. Usually this involves detailed (professional) work on the program itself.
- System conversion: Changing from one operating system to another—for example, from MS-DOS to UNIX or OS/2.

conversion table \kən-vər´zhən tā`bl\ n. A table_s, listing a set of characters or numbers and their equivalents in another coding scheme. Common examples of conversion tables include ASCII tables, which list characters and their ASCII values, and decimal-to-hexadecimal tables. Several conversion tables are in Appendixes A–E.

converter \kan-var'tar'\ n. Any device that changes electrical signals or computer data from one form to another. For example, an analog-to-digital converter translates analog signals to digital signals.

cookbook¹ \kook\ook\ adj. Of, pertaining to, or characteristic of a book or manual that presents information using a step-by-step approach. For example, a cookbook approach to programming might present a series of sample programs that the reader could analyze and adapt to his or her own needs.

cookbook² \kook book\ n. A computer book or manual that presents information using a step-by-step approach. Most often, cookbook refers to a programming guide, but it can refer to a book that shows how to accomplish specialized tasks in an application.

cooked mode \kookd' mod\ n. One of two forms (the other being raw mode) in which an operating system such as UNIX or MS-DOS "sees" the handle, or identifier, for a character-based device. If the handle is in cooked mode, the operating system stores each character in a buffer and gives special treatment to carriage returns, end-of-file markers, and linefeed and tab characters, sending a line of data to a device, such as the screen, only after it reads a carriage-return or end-of-file character. In cooked mode, characters read from standard input are often automatically echoed (displayed) on the screen. Compare raw mode.

cookie \kook'e\ n. 1. A block of data that a server returns to a client in response to a request from the client. 2. On the World Wide Web, a block of data that a Web server stores on a client system. When a user returns to the same Web site, the browser sends a copy of the cookie back to the server. Cookies are used to identify users, to instruct the server to send a customized version of the requested Web page, to submit account information for the user, and for other administrative purposes. 3. Originally an allusion to "fortune cookie," a UNIX program that outputs a different message, or "fortune," each time it is used. On some systems, the cookie program is run during user logon. cookie filtering tool \kook`e fil'tər-eng tool`\ n. A utility that prevents a cookie on a Web browser from relaying information about the user requesting access to a Web site. See also cookie (defini-

tion 2).

cooperative multitasking \kō-op`ər-ə-tiv mul´tē-ta-skēng, mul´tī-ta-skēng\ n. A type of multitasking in which one or more background tasks are given processing time during idle times in the foreground task only if the foreground task allows it. This is the primary mode of multitasking in the Macintosh operating system. See also background¹, context switching, foreground¹, multitasking, time slice. Compare preemptive multitasking.

H:)

. 1:

basis.

3.7

manium or siliing the etching in the surroundhography.

n. A communire paths to any

nications, a unit nically from one contain one or beginning and ers, a software-.ldress, type of ion), and errornation. A mesom sender to . or it can be rough a switchne intermediate transintrol character . frame (definisage switching, cket switching, iftware, a piece application or agest an action. it an event has :rating environ-



ments, such as Microsoft Windows, a unit of information passed among running programs, certain devices in the system, and the operating environment itself.

message header \mes'əj hed'ər\ n. A sequence of bits or bytes at the beginning of a message that usually provides a timing sequence and specifies such aspects of the message structure as its length, data format, and block identification number. See also header (definition 2).

message of the day \mes'əj əv dhə dā'\ n. A daily bulletin for users of a network, multiuser computer, or other shared system. In most cases, users are shown the message of the day when they log into the system. Acronym: MOTD (M'O-T-D'). message queue \mes'əj kyoo\\ n. An ordered list of messages awaiting transmission, from which they are taken up on a first in, first out (FIFO)

message reflection \mes'əj rə-flek\shən\ n. In object-oriented programming environments, such as Visual C++, OLE, and ActiveX, a function that allows a control to handle its own message. See also ActiveX controls, control (definition 2). OCX, VBX.

Message Security Protocol \mes'əj se-kyər'i-të prō'tə-kol\ n. A protocol for Internet messages that is based on the use of encryption and verification to ensure security. It also allows for permissions at the server level for delivery or rejection of e-mail. Acronym: MSP (M'S-P').

message switching \mes'aj swich'ēng\ n. A technique used on some communications networks in which a message, with appropriate address information, is routed through one or more intermediate switching stations before being sent to its destination. On a typical message-switching network, a central computer receives messages, stores them (usually briefly), determines their destination addresses, and then delivers them. Message switching enables a network both to regulate traffic and to use communications lines efficiently. Compare circuit switching, packet switching.

messaging \mes'a-jēng\ n. The use of computers and data communication equipment to convey messages from one person to another, as by e-mail, voice mail, or fax.

messaging application \mes \(\pi\)-jeng a-pla-k\(\alpha\) shan\\
n. An application that enables users to send messages (such as e-mail or fax) to each other.

ার্কি

Messaging Application Programming Interface \mes`a-jēng a-pla-kā-shan prō'gram-ēng in tar-fās\ n. See MAPI.

messaging client \mes'ə-jēng klī'ənt\ n. An application program that enables its user to send or receive messages (such as e-mail or fax) to and from other users with the help of a remote server.

metacharacter \met'ə-kâr'ək-tər\ n. A character embedded in a program source or a data stream that conveys information about other characters, rather than itself representing a character. A simple example is the backslash (\) character, which, when used in strings in the C programming language, indicates that the letter following the backslash is part of an escape sequence that enables C to display a nongraphic character. See also escape character.

metacompiler \met'a-kam-pī'lar\ n. A compiler that produces compilers. The UNIX utility race (Yet Another Compiler-Compiler) is a metacompiler. If it is given a language specification, vacc produces a compiler for that language. See also compiler (definition 2).

Meta-Content Format \met`a-kon´tent for`mat\
n. An open format for describing information about content of a structured body of data such as a Web page, a set of files on a Windows desktop, or a relational database. Meta-Content Format might be used for indexes, data dictionaries, or price lists. Acronym: MCF (M°C-F°).

meta data or metadata \met'ə dâ'tə, dat'ə\ n. Data about data. For example, the title, subject, author, and size of a file constitute meta data about the file. See also data dictionary, repository.

Metadata Interchange Specification \met ə-dā`tə in´tər-chānj spes-ə-fə-kā`shən\ n. A set of specifications dealing with the exchanging, sharing, and managing of meta data. Acronym: MDIS (M`D-I-S´). See also meta data.

metafile \met'a-fil'\ n. A file that contains or defines other files. Many operating systems use metafiles to contain directory information about other files on a given storage device.



How the Internet Works, Millennium Edition Copyright[®] 1999 by Que[®]

Executive Editor Greg Wiegand

Acquisitions Editor Stephanie J. McComb

Development Editor Nicholas Goetz

Managing Editor Thomas F. Hayes
Project Editor Karen S. Shields

Copy Editor Kay Hoskin

Copy Editor Kay Hoskin

Indexer Christine Nelsen

Proofreader Maribeth Echard

Technical Editor Bill Bruns

Illustrators Sarah Ishida, Mina Reimer, Stephen Adams, and Shelley Norris

Book Designers Carrie English and Bruce Lundquist

Copy Writer Eric Borgert

Layout Technicians Lisa England, Cyndi Davis-Hubler

All rights reserved. No part of this book shall be reproduced, stored in a retrieval system, or transmitted by any means, electronic, mechanical, photocopying, recording, or otherwise, without written permission from the publisher. No patent liability is assumed with respect to the use of the information contained herein. Although every precaution has been taken in the preparation of this book, the publisher and author assume no responsibility for errors or omissions. Neither is any liability assumed for damages resulting from the use of the information contained herein.

International Standard Book Number: 0-7897-2132-5

Library of Congress Catalog Card Number: 99-63011

Printed in the United States of America

First Printing: August 1999

01 00

This book was produced digitally by Macmillan Computer Publishing and manufactured using computer-to-plate technology (a filmless process) by GAC, Indianapolis, Indiana.

Trademarks

All terms mentioned in this book that are known to be trademarks or service marks have been appropriately capitalized. Que cannot attest to the accuracy of this information. Use of a term in this book should not be regarded as affecting the validity of any trademark or service mark.

Warning and Disclaimer

Every effort has been made to make this book as complete and as accurate as possible, but no warranty or fitness is implied. The information provided is on an "as is" basis. The authors and the publisher shall have neither liability nor responsibility to any person or entity with respect to any loss or damages arising from the information contained in this book.

BEST AVAILABLE COPY

BEST AVAILABLE CO